

CLAIMS

What is claimed is:

- 5 1. A holding device for holding a portable object, the holding device comprising:
 - a support platform;
 - a first arm coupled to the support platform;
 - a second arm coupled to the support platform;
 - a biasing member located between the first and second arms;

10 a locking mechanism capable of maintaining the first arm and the second arm in any one of a plurality of discrete positions with respect to each other; and

 a release button adjacent to the support platform, the release button capable of releasing the locking mechanism,

 wherein:

15 the biasing member is capable of urging at least a portion of the first arm and at least a portion of the second arm toward each other.

- 2. The holding device of claim 1 further comprising:
 - a first grip coupled to the first arm; and
 - 20 a second grip coupled to the second arm.

- 3. The holding device of claim 1 wherein:
 - the first arm comprises a first arm axis;

the second arm comprises a second arm axis;
the first arm axis and the second arm axis are substantially perpendicular to the support platform;
the first arm is capable of rotating about the first arm axis; and
5 the second arm is capable of rotating about the second arm axis.

4. The holding device of claim 1 wherein:

the biasing member comprises a spring.

10 5. The holding device of claim 1 wherein:

the support platform comprises an upper surface and a lower surface substantially opposite the upper surface; and
the release button is located at the upper surface of the support platform.

15 6. The holding device of claim 5 wherein:

the release button protrudes from the support platform.

7. The holding device of claim 5 wherein:

the lower surface of the support platform is coupled to a mounting mechanism.

20 8. The holding device of claim 1 wherein:

the locking mechanism comprises:

a ratchet; and

a pawl capable of engaging the ratchet.

9. The holding device of claim 8 wherein:

the ratchet is integral with one of the first and second arms.

5

10. The holding device of claim 8 wherein:

the ratchet comprises a plurality of teeth and a plurality of indentations;

the pawl is capable of engaging at least one of the plurality of indentations; and

the first arm and the second arm are held in a fixed position with respect to each other

10 when the pawl is engaged with one of the plurality of indentations.

11. The holding device of claim 1 wherein:

the first arm further comprises a first plurality of teeth;

the second arm further comprises a second plurality of teeth; and

15 the first plurality of teeth interacts with the second plurality of teeth such that a movement of one of the first and second arms causes a movement in the other of the first and second arms.

12. The holding device of claim 1 further comprising:

20 a pad over the release button.

13. The holding device of claim 1 wherein:

the first grip and the second grip comprise:

a substantially rigid core; and
a flexible material located adjacent to the core.

14. The holding device of claim 13 wherein:

5 the core is formed from a rigid plastic material; and
 the flexible material comprises a thermoplastic elastomer.

15. A holding device for holding a portable object, the holding device comprising:
- a support platform having an upper surface for supporting the portable object and a lower surface substantially opposite the upper surface, the upper surface having a release button thereon;
- 5 a first lever coupled to the support platform;
- a second lever coupled to the support platform;
- a first grip coupled to a first portion of the first lever;
- a second grip coupled to a first portion of the second lever;
- a first handle coupled to a second portion of the first lever;
- 10 a second handle coupled to a second portion of the second lever;
- a spring coupled between second portions of the first and second levers; and
- a locking mechanism capable of maintaining the first lever and the second lever in any one of a plurality of discrete positions with respect to each other,
- wherein:
- 15 the spring is capable of urging the first grip and the second grip toward each other;
- the release button is capable of being activated by the application of a force to the portable object when the portable object is supported by the upper surface and located between the first and second grips; and
- 20 the release button is capable of releasing the locking mechanism.

16. The holding device of claim 15 wherein:

the first arm comprises a first axis of rotation located between the first and second portions of the first arm;

the second arm comprises a second axis of rotation located between the first and second portions of the second arm;

5 the first arm axis and the second arm axis are substantially perpendicular to the upper surface of the support platform;

the first arm is capable of rotating about the first arm axis; and

the second arm is capable of rotating about the second arm axis.

10 17. The holding device of claim 15 wherein:

the release button protrudes from the support platform.

18. The holding device of claim 15 wherein:

the lower surface of the support platform is coupled to a mounting mechanism.

15

19. The holding device of claim 15 wherein:

the locking mechanism comprises:

a ratchet; and

a pawl capable of engaging the ratchet.

20

20. The holding device of claim 19 wherein:

the ratchet is integral with one of the first and second arms.

21. The holding device of claim 20 wherein:

the ratchet comprises a plurality of teeth and a plurality of indentations;

the pawl is capable of engaging at least one of the plurality of indentations; and

the first arm and the second arm are held in a fixed position with respect to each other

5 when the pawl is engaged with one of the plurality of indentations.

22. The holding device of claim 21 wherein:

the first arm further comprises a first plurality of teeth at the second portion of the
first arm;

10 the second arm further comprises a second plurality of teeth at the second portion of
the second arm; and

the first plurality of teeth interacts with the second plurality of teeth such that a
movement of one of the first and second arms causes a movement in the other of the first
and second arms.

15

23. The holding device of claim 15 further comprising:

a pad over the release button.

24. The holding device of claim 23 wherein:

20 the first grip and the second grip comprise:

a substantially rigid core; and

a flexible material located adjacent to the core.

25. The holding device of claim 24 wherein:

the core is formed from a rigid plastic material; and
the flexible material comprises a thermoplastic elastomer.

26. A method of manufacturing a holding device for a portable object, the method comprising:

providing a support platform having a first arm and a second arm coupled thereto;

5 providing a biasing member capable of urging at least a portion of the first arm and at least a portion of the second arm toward each other, the biasing member located between the first arm and the second arm;

providing a locking mechanism capable of maintaining the first arm and the second arm in any one of a plurality of discrete positions with respect to each other; and

10 providing a release button adjacent to the support platform, the release button capable of releasing the locking mechanism.

27. The method of claim 26 further comprising:

providing a first grip coupled to the first arm; and

providing a second grip coupled to the second arm.

15

28. The method of claim 26 further comprising:

providing the first arm to be rotatable about a first arm axis; and

providing the second arm to be rotatable about a second arm axis,

wherein:

20 the first arm axis and the second arm axis are substantially perpendicular to the support platform.

29. The method of claim 26 further comprising:

providing the locking mechanism to comprise:

a ratchet; and

a pawl capable of engaging the ratchet.